<div align="center">REMARKS</div>

Claims 1, 2, 5-8, 11-19, 21 and 22 are pending. Claims 1, 13, 14, 17 and 19 have been amended to more particularly point out Applicant's invention. In particular, to advance prosecution, claims 1 and 19 have been amended to incorporate the features of claims 3 and 20, respectively. Claims 3 and 20 have been cancelled without prejudice in view of the amendments of claims 1 and 19. Claims 13 and 14 have been amended to correct an antecedent basis issue. The specification supports the amendment of claim 17, for example at paragraph [0029] of the published application. No new matter is introduced by the amendments.

Claims 3 and 20 have been found allowable, and are objected to for depending on rejected base claims. Features of allowable claims 3 and 20 have been introduced into independent claims 1 and 19, respectively. Claims 1, 2, 5-8, 11-19, 21 and 22 stand rejected. Applicants respectfully request reconsideration of the rejection based on the following comments.

Rejection Under 35 U.S.C. § 112, Second Paragraph

The Examiner rejected claims 13 and 14 under 35 U.S.C. § 112, second paragraph as being indefinite. Specifically, the Examiner noted that "the dispersion" lacked antecedent basis. Applicant has corrected this issue. Applicant thanks the Examiner for a careful reading of the claims. In view of the amendments of claims 13 and 14, Applicant respectfully requests withdrawal of the rejection of claims 13 and 14 under 35 U.S.C. § 112, second paragraph as being indefinite.

Rejection Over WO 95/03907

The Examiner rejected claims 1 and 2 under 35 U.S.C. § 102(b) as being anticipated by PCT application WO 95/03907 (WO '907). The Examiner pointed to Table 2 as support for the

rejection. With all due respect, Applicant maintains that this reference upon close scrutiny does not render Applicant's claimed invention *prima facie* anticipated. Nevertheless, to advance prosecution, Applicant has introduced the feature of claim 3 into independent claim 1. Since claim 3 has been found allowable, amended claims 1 and 2 are correspondingly allowable. In view of this amendment, Applicant respectfully requests withdrawal of the rejection over WO '907.

Claim Rejection under 35 U.S.C. § 102 Over König et al.

The Examiner rejected claims 1, 5, 6, 8, 19 and 21 under 35 U.S.C. § 102(b) as being anticipated by U.S. Patent 5,384,306 to König et al. ("König"). While Applicant maintains that there are patentable distinction for the subject matter of previous claims 1 and 19 over König, to advance prosecution Applicant has amended claims 1 and 19 to introduce the subject matter of previous claims 3 and 20 respectively into claims 1 and 19. Since claims 3 and 20 had been found allowable, the amended claims 1, 19 and claims depending form these claims are correspondingly allowable. Applicant respectfully requests withdrawal of the rejection of claims 1, 5,6 8, 19 and 21 over König.

Claim Rejection Under 35 U.S.C. § 102(b) Over Borsella et al.

The Examiner rejected claims 17 and 18 under 35 U.S.C. § 102(b) as being anticipated by an article to Borsella et al. (Borsella). To advance prosecution, Applicant has amended independent claim 17. The discussion in Borsella is limited to reactions with trimethylaluminum and N_2O as an oxygen source. Borsella teaches away from the use of O_2 due to its spontaneous reaction with their aluminum precursor. Spontaneous reaction would be inconsistent with the laser pyrolysis apparatus taught by Borsella. See US 7,507,382, entitled "Multiple Reactant Nozzles for a Flowing Reactor," which teaches a later invented suitable laser pyrolysis reactor

with spontaneous reactive precursors. As amended, claim 17 recites the use of O_2 as a reactant and an aluminum precursor that does not spontaneously react with O_2. Thus, Borsella does not *prima facie* anticipate claims 17 or 18 as amended. Applicant respectfully requests withdrawal of the rejection of claims17 and 18 under 35 U.S.C. § 102(b) as being anticipated by Borsella.

Rejection Under 35 U.S.C. § 103 Over König

The Examiner rejected claims 1, 2, 5-7, 19, 21 and 22 under 35 U.S.C. § 103(a) as being unpatentable over König. While Applicant does not acquiesce with respect to the assertions of obviousness of the claimed invention over König, Applicant has amended independent claims 1 and 19 to more particularly point out their claimed invention. Specifically, the features of claims 3 and 20 respectively has been placed into claims 1 and 19. Since claims 3 and 20 have been found allowable, amended claims 1, 19 and claims depending from these claims are correspondingly allowable. Applicant respectfully requests withdrawal of the rejection of claims 1, 2, 5-7, 19, 21 and 22 under 35 U.S.C. § 103(a) as being unpatentable over König.

Rejection Under 35 U.S.C. § 103(a) Over Hampden-Smith et al.

The Examiner rejected claims 1, 5 and 11-16 under 35 U.S.C. § 1039a) as being unpatentable over U.S. patent 6,602,439 to Hampden-Smith et al. (Hampden-Smith). While Applicant maintains that Hampden-Smith falls short of rendering Applicant's invention *prima facie* obvious, Applicant has amended independent claim 1 to advance prosecution. Specifically, claim 1 has been amended to recite the features form now cancelled claim 3. Since claim 3 was allowable, amended claim 1 and claims depending from claim 1 are correspondingly allowable. In view of the amendments, Applicant respectfully requests withdrawal of the rejection of claims 1, 5 and 11-16 under 35 U.S.C. § 1039a) as being unpatentable over Hampden-Smith.

<u>CONCLUSION</u>

In view of the foregoing, it is submitted that this application is in condition for allowance. Favorable consideration and prompt allowance of the application are respectfully requested.

The Examiner is invited to telephone the undersigned if the Examiner believes it would be useful to advance prosecution.

Respectfully submitted,

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